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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/697,648	10/31/2003	Haruhiko Usa	62758-063	8466
7590 01/16/2008 MCDERMOTT, WILL & EMERY 600 13th Street, N.W. Washington, DC 20005-3096			EXAMINER TO, JENNIFER N	
			ART UNIT 2195	PAPER NUMBER
			MAIL DATE 01/16/2008	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/697,648	<b>Applicant(s)</b> USA ET AL.	
	<b>Examiner</b> Jennifer N. To	<b>Art Unit</b> 2195	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 24 October 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 October 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |                                                                                                            |                                                                                         |
|------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____                                                |

**DETAILED ACTION**

1. Claims 1-12 are pending for examination.
2. Claims 5-8 are objected to because of the following reason: claims 5-8 raising an issue of which a non-statutory subject matter was claimed (i.e. software per se). For instance, claim 5 claimed a computer-resource management server comprising a resource utilization state data collection unit, a correlation-coefficient computation unit, a resource allocation unit, but according to the specification paragraph [0031] the resource management server has functional modules (software modules) wherein the function modules include a resource utilization state data collection unit, a correlation-coefficient computation unit, a resource allocation unit. Thus applicant is claiming software per se subject matter, which is a non-statutory subject matter. Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-12 are rejected under 35 U.S.C. 102(e) as being anticipated by Kawamoto et al. (hereafter Kawamoto) (U.S. Patent No. 7117499).

5. Kawamoto was cited in the previous office action.

6. As per claim 1, Kawamoto teaches a computer-resource allocation method adopted by a computer system allocating a computer resource to a plurality of computers executing programs independently of each other (col. 1, lines 22-24; col. 2, lines 26-30; col. 4, lines 34-36), said method comprising the steps of:

(1) collecting states of computer-resource utilizations of said computers (col. 5, lines 59-63; load measuring modules call the library to retrieve loads indicated CPU usage ratio, memory use ration, disk use ratio (all the ratios are representing the states of computer resource utilization));

(2) computing coefficients of correlation among said computers with respect to said computer-resource utilizations of said computers on the basis of data representing said collected states of computer-resource utilizations (col. 11, lines 46-50); and

(3) computing computer-resource allocation quantities of said computers on the basis of said collected states of computer-resource utilizations and said computed coefficients of correlation and allocating said computer resource to said computers in accordance with said computer-resource allocation quantities (col. 2, lines 46-54).

7. As per claim 2, Kawamoto teaches that wherein said step (3) includes the sub-steps of: forecasting states of computer-resource utilizations of said computers on the basis of data representing said collected states of computer-resource utilizations; and allocating said computer resource to said computers in accordance with said forecasted states of computer-resource utilizations and said computed coefficients of correlation (col. 2, lines 46-54, 58-65; col. 6, lines 3-6).

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8. As per claim 3, Kawamoto teaches that wherein said step (3) includes the sub-steps of: determining one of said computers as a specific computer requiring a larger allocated quantity of said computer resource (col. 12, lines 3-6); setting a decrease in quantity for each of said computers at such a value that, the smaller the coefficient of correlation with said specific computer, the larger the value 9col. 12, lines 57-64); subtracting said decrease in quantity from a quantity of said computer resource allocated to each of said computers except said specific computer (col. 12, lines 36-39); and transferring said decrease in quantity subtracted from said quantity of said computer resource allocated to each of said computers to said specific computer (col. 12, lines 39-40).

9. As per claim 4, Kawamoto teaches that wherein said coefficients of correlation are switched from one values to others in dependence on a time frame and characteristics of programs running on said computers (col. 7, lines 10-13).

10. As per claims 5-8, they are rejected for the same reason as claims 1-4 above.

11. As per claim 9, it is rejected for the same reason as claim 1 above. In addition, Kawamoto teaches control means for allocating said computer resource to said computers in accordance with said computer-resource allocation quantities received from said computer-resource management server (abstract; col. 2, lines 46-54)

12. As per claim 10, it is rejected for the same reason as claim 3 above.

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13. As per claim 11, Kawamoto teaches that wherein said computer that allocates said computer resource is the computer pertaining to a plurality of physical computers (abstract).

14. As per claim 12, it is rejected for the same reason as claim 2 above.

***Response to Arguments***

15. Applicant's arguments filed 10/24/2007 fully considered but they are not persuasive.

16. In the remark applicant argued:

(1) Kawamoto fails to teach calculates a coefficient of correlation based on data representing collected states of computer-resource utilizations.

(2) Kawamoto fails to teach forecast the lack of resource in future by referring to claim 2.

17. Examiner respectful disagreed.

As to point (1), Kawamoto teaches calculating a coefficient of correlation (allocating ratio SNI) based on data representing collected states of computer resource utilizations (the data representing the collected states here are the loads, because loads indicated CPU usage ratio, memory use ration, disk use ratio and all the ratios are representing the states of computer resource utilization (col. 11, lines 46-55).

As to point (2), there is nowhere in claim 2 recited the step of forecasting the lack of resource in future. Claim 2 recited the step of forecasting the resource based on the collected states of computer resource utilization. Kawamoto discloses the hypervisor allocates the computer resources to LPARs (a plurality of computers) according to the

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allocation ratios of the computer resources relative to the LPARs that are determined prior to system operation (col. 5, lines 22-26). The allocation ratios are calculated based on data representing collected states of computer resource utilizations (see explanation in paragraph 6 of this action). Therefore, Kawamoto teaches the step of forecasting the resource based on the collected states of computer resource utilization.

### ***Conclusion***

18. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Armstrong et al. (U.S. Publication No. 2002/0156824), Yamaguchi et al. (U.S. Publication No. 2002/0091786), Kauffman (U.S. Patent No. 6633916), Eilert et al. (U.S. Patent No. 6587938), and Greenstein et al (U.S. Patent No. 5784702) teach system and method for allocating computing resource in a logical partitioned computer system.

Kubo et al. (U.S. Publication No. 2002/0165900), Hamilton et al. (U.S. Patent No. 7299469), Kubo et al. (U.S. Patent No. 7062768), Kubo (U.S. Patent No. 6986139), and Matsuura (U.S. Patent No. 5530860) teach system and method for allocating resource based on estimating load, and load indexes.

19. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the

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advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

20. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer N. To whose telephone number is (571) 272-7212. The examiner can normally be reached on M-T 6AM- 3:30 PM, F 6AM- 2:30 PM.

21. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (571) 272-3756. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

22. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jennifer N. To  
Examiner  
Art Unit 2195

  
SUPERVISORY PATENT EXAMINER  
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